

REMARKS

Claims 10 and 11 stand rejected under 35 USC 112, second paragraph, as indefinite. The amendments above serve to overcome this rejection. If the Examiner considers that the claims as amended still present indefiniteness problems, applicants respectfully request the Examiner to telephone their undersigned attorney to discuss what further amendments might be necessary in the view of the Examiner.

Because the amendments to the pending claims are quite extensive, applicants have provided an Appendix setting forth the amended claims in clean form for the convenience of the Examiner at the end of this document. Applicants have added new claims 13-21 in view of the amendments broadening claim 10. These amendments, and the amendments to claim 10, are supported particularly in the specification at pages 12-20.

Claims 9-11 stand rejected under 35 USC 103(a) on Pinkerton in view of Japan '803. The Examiner reasoned that Pinkerton teaches producing Sm-Fe-N based alloy powder by forming a melt of Sm and Fe, quenching the Sm-Fe melt to form a solidified body, comminuting the Sm-Fe body to form an alloy powder and nitriding the Sm-Fe alloy powder to form the Sm-Fe-N based alloy powder claimed. The Examiner cited the Japan '803 reference on the ground that the heating step disclosed in this reference is the same as recited in applicants' claims. The Examiner reached this conclusion on the basis that "the Examiner considers Japan '803's heating step used to form the composite oxide to be equivalent to applicants' calcining step." This rejection and its supporting reasoning are respectfully traversed.

Before addressing the specific disclosures of the cited references, applicants note that the Examiner's logic in relying upon Japan '803 is legally and factually erroneous. The last two sentences on page 3 of the Action demonstrate the logical flaw in the Examiner's reasoning. In the next to last sentence on page 3 of the Action, the Examiner says that he considers the heating step disclosed in Japan '803 "to be equivalent to applicants' calcining step." Whether or not the step disclosed in the prior art is "equivalent" to the claimed step begs the question as to whether a person of ordinary skill in the art would have been motivated by Japan '803 to do what is

claimed, and not simply an equivalent of what is claimed. The disclosure in the prior art of an equivalent to what is claimed is not logically the same as a disclosure in the prior art of what is claimed. Based upon this finding of equivalence, the Examiner takes the next logically impermissible step in the last sentence on page 3 of the Action by concluding from the Examiner's finding of equivalence that the process disclosed in Japan '803 "is the same as recited in applicants' claims." Applicants respectfully submit that the last sentence on page 3 of the Action is a clear non sequitur, in that, as the Examiner well knows, an "equivalent" is by definition not the same as what it is equivalent to. An "equivalent" may produce the same result in substantially the same way but it is clearly *not* the "same" as what it is equivalent to.

MPEP 2144.06 makes it clear that "[in] order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents." The Examiner has made no attempt whatever to argue that Japan '803 discloses a heating step which is an art-recognized equivalent to the calcining steps set forth in the claims of this application. For these reasons, based on logic and the Examiner's reasoning alone, the Examiner has failed to make out a *prima facie* case of obviousness based on the cited prior art.

In order to expedite prosecution, applicants provide additional reasons why the invention is patentable over the prior art. Simply put, persons of ordinary skill in the art would not have been motivated to refer to Japan '803 in connection with the claimed process since Japan '803 relates to the preparation of magnetostrictive materials, and not to permanent magnet materials at all. Persons of ordinary skill in this art know that magnetostrictive materials have different characteristics than do permanent magnetic materials and that nitriding is not necessary because magnetostrictive materials do not require the higher Curie temperatures produced by nitriding. Applicants also observe that Japan '803 does not disclose the co-precipitation of Sm-Fe, as set forth in the claims of this application and thus does not suggest the other aspects of the claimed invention for which it is relied upon. Finally, the Examiner has not provided any reason why a

person of ordinary skill in the art would have eliminated the melting step disclosed in Pinkerton by reference to Japan '803, in view of the substantially different subject matter of Japan '803 and the lack of any specific suggestion in Japan '803 to dispense with any form of melting step.

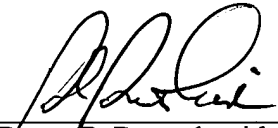
For the foregoing reasons, applicants respectfully submit that the subject matter of original claims 9-11 is patentable over the prior art and that claims 9-11 and 13-21 in this application should be allowed. Applicants also respectfully submit that claim 12 should be rejoined and allowed along with the other claims in this application.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. **204552018610**.

Respectfully submitted,

Dated: October 6, 2003

By:


Barry E. Bretschneider
Registration No. 28,055

Morrison & Foerster LLP
1650 Tysons Boulevard, Suite 300
McLean, Virginia 22102
Telephone: 703-760-7743
Facsimile: 703-760-7777

APPENDIX

CLEAN VERSION OF AMENDED CLAIMS

9. (Clean as Amended) A process for producing a permanent magnet material comprising Sm-Fe-N based alloy powder, comprising:
- allowing a precipitate containing Sm and Fe to co-precipitate from a solution in which Sm and Fe are dissolved;
 - calcining the precipitate to form metal oxide;
 - mixing the metal oxide powder with a metal reducing agent;
 - reducing and diffusing the metal oxide powder mixed with the metal reducing agent into Sm-Fe alloy powder; and
 - nitriding the Sm-Fe alloy powder to obtain said Sm-Fe-N based alloy powder.
10. (Clean as Amended) The process for producing a permanent magnet material comprising Sm-Fe-N based alloy powder according to claim 9, wherein said precipitate has a particle shape of an average degree of roundness of not less than 80%, and said Sm and Fe are uniformly distributed in each particle.
11. (Clean as Amended) The process for producing a permanent magnet material comprising Sm-Fe-N based alloy powder according to claim 9, further comprising heating said metal oxide formed by calcining the precipitate at a temperature in a range from 300 to 900°C in a reducing gas to preliminarily reduce all or part of the iron oxide into metal iron before said reducing and diffusing the resulting metal oxide powder into Sm-Fe alloy powder.